Seat N	No.:	Enrolment No.	
a]	GUJARAT TECHNOLOGICAL UNIVERSITY BPHARM – SEMESTER II • EXAMINATION – WINTER • 2014	
Subj	ect coo	le: 220003 Date: 03-12-2014	
Subj	ect Na	me: Pharmaceutical Chemistry - II	
Time	Time: 02:30 pm - 05:30 pm Total Marks: 80		
Instr	uction	IS:	
	1. At	tempt any five questions.	
	2. M 3. Fi	ake suitable assumptions wherever necessary. gures to the right indicate full marks.	
01	(a)	Differentiate thermochemistry and photochemistry	06
V .1	(u) (b)	Discuss absorption of light by matter and their application in	05
	(0)	pharmacy	00
	(c)	Describe terms: Quantum efficiency, wavelength, absorption,	05
		monochromator	
Q.2	(a)	Describe about surface tension and methods used to determine it.	06
	(b)	Define terms: optical rotation, fluorescence, Heat of neutralization,	05
		refractive index.	05
	(c)	Describe principle of ostwarld's viscometer.	05
Q.3	(a)	Describe Raoult's law in detail.	06
	(b)	Describe terms: Dipolemoment, Reverse osmosis, Delisquence,	05
		osmotic pressure	
	(c)	Write a note on partition co-efficient.	05
Q.4	(a)	Write note on Gibbs adsorption isotherm.	06
	(b)	Describe application of adsorption in pharmaceuticals.	05
	(c)	Write difference between physical and chemical adsorption.	05
Q.5	(a)	Write a note on Debye- Huckel theory.	06
	(b)	Describe: Specific conductivity, equivalent conductivity,	05
		conductance, cell constant	
	(c)	Describe: Kinetic, order of reaction, molecularity of reaction and catalyst	05
Q. 6	(a)	Discuss effect of temperature on rate of reaction.	06
	(b)	What is a triple point for water? Explain its importance in changes	05
		of state.	
	(c)	State and explain first law of themodynamics	05
07	(2)	Describe application of radio activity in pharmacy	በራ
V •1	(a)	Write a note on 'Geiger- Muller Counter'	00
	(\mathbf{c})	Describe units of radio activity in detail	05
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